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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------|------------------|
| 10/645,559 | 08/22/2003 | Masayoshi Nishio | 0229-0773P | 9174 |
| 2292 | 7590 | 05/19/2004 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | BLAU, STEPHEN LUTHER | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3711 | |

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,559

Applicant(s)

NISHIO, MASAYOSHI

Examiner

Stephen L. Blau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-9 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fenton in view of 2001-286585 and Kobayashi.

Fenton discloses a shaft length of 43 inches (Fig. 6), and a torque of 2.5 to 4.1 degrees (Col. 5, Lns. 29-31).

Fenton lacks a club length from 43-48 inches, a head volume not less than 250 cc, and a torque which meets the equations as defined in claim 1.

2001-286585 discloses a head having a head volume not less than 250 cc in the form of 360 ml or more (English Solution), and a distance between a gravity point of a head and a center line of a shaft being 45 mm or less (English Solution) in order to have a head with a high inertial moment, light weight and short distance of center of gravity in spite of a large volume (English Abstract). In view of the reference of 2001-286585 it would have been obvious to modify the club of Fenton to have a head having a head volume of 360 ml or more and a distance between a gravity point of a head and a center line of a shaft being 45 mm or less in order to have a head with a high inertial moment,

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light weight and short distance of center of gravity in spite of a large volume. As such the club would meet the relationship between torque and a distance between a gravity point of a head and a center line of a shaft as defined in claim 1.

Kobayashi discloses a head with a shaft being inserted to the sole or close to (Fig. 4). In view of the patent of Kobayashi it would have been obvious to have a shaft secured to a head at or close to a sole of a head in order to have more area between a shaft and head to secure the head and shaft together. As such the shaft and club lengths will both be about 43 inches.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fenton in view of 2001-286585 and Kobayashi as applied to claims 1-2 and 4-6 above, and further in view of Oonuki.

Fenton lacks a gravity point distance L being in a range of from 33-41 mm. 2001-286585 discloses a distance between a gravity point of a head and a center line of a shaft being 45 mm or less (English Solution) in order to have a head with a high inertial moment, light weight and short distance of center of gravity in spite of a large volume (English Abstract). Oonuki discloses a gravity point distance L being in a range of from 20-50 mm (Col. 2, Lns. 23-35). In view of the references of 2001-286585 and Oonuki it would have been obvious to modify the club of Fenton to have a gravity point distance L being in a range of from 33-41 mm in order to have a head with a high inertial moment, light weight and short distance of center of gravity in spite of a large volume.


Allowable Subject Matter

4. Claims 7-9 are allowed. None of the prior art discloses or renders as obvious a method of making a club with a step of examining whether the torque and gravity point distance satisfies the equations as defined in claim 7 in addition to the other elements of structure claimed.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Blau whose telephone number is (703) 308-2712. The examiner is available Monday through Friday from 8 a.m. to 4:30 p.m.. If the examiner is unavailable you can contact his supervisor Greg Vidovich whose telephone number is (703) 308-1513. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858. (TC 3700 Official Fax 703-872-9306)

slb/ 16 May 2004


STEPHEN BLAU
PRIMARY EXAMINER